

STARS2015 - 3rd Caribbean Symposium on Cosmology, Gravitation, Nuclear
and Astroparticle Physics / SMFNS2015 - 4th International Symposium on
Strong Electromagnetic Fields and Neutron Stars

Contribution ID: 100

Type: **Talk**

Galileons and Black Holes

Sunday 10 May 2015 17:30 (30 minutes)

I will discuss spherically symmetric solutions of hypothetical scalar field “galileon” models, first in flat space-time, and then in the context of general relativity. For the latter, using numerical methods, I find both censored and naked solutions arising from physically reasonable boundary conditions. Both types of solutions are of comparable non-zero measure in terms of the initial conditions. Censored solutions exhibit event horizons, more or less as expected, while naked solutions have curvature singularities without horizons.

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Track Classification: STARS2015